BRUHAT BANGALORE MAHANAGARA PALIKE
YELAHANKA ZONE

Name of Work :-Detailed Estimate for The work of Improvements of Roads and Construction of CC Drain with Covering Slab from Kodigehalli Circal to Govt. School in ward no. 8, Kodigehalli sub division

Estimated Cost :- 15.90 Lakhs

Sl no.	Description of item	Unit	No.	L	B/W	D/T/H	Qty.	Rate	Amount
1	KSRRB 300-1. Earthwork excavation by manual means in Hard soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications complete as per specifications. MORTH Chapter 3 (Page no 149, Item no. 19.1 of BCSR 2011-12)	Cum							
	Kodigehalli ole to govt school		2	193.00	0.50	0.45	86.85		
	Culvert		2	5.00	1.35	1.50	20.25		
							107.10	87.05	9323.06
	Basic Rate	80.60							
	Area Weightage @ 8%	6.45							
	Total	87.05							
2	Removing B.S. slab of Drain and stacking. (Page no 28, Item no. 5.32 of BCSR 2011-12)	Sqm							
			1	193.00		1.35	260.55		
	Culvert		1	5.00		1.35	6.75		
	Basic Rate	44.00					267.30	47.52	12702.10
	Area Weightage @ 8%	3.52							
	Total	47.52							
3	KSRRB 300-44 Scarifying top bituminous surface or surface dressing or premix carpet including picking up scarified materials, stacking of old serviceable materials within a lead of 100 metres by manual means including cost of all abour charges complete as per specifications. MORTH Chapter 3 (Page no 155, Item no. 19.50 of BCSR 2011-12)	Sqm							
			1	193.00	6.50		1254.50		
							1254.50	19.33	24249.49
	Basic Rate	17.90							
	Area Weightage @ 8%	1.43							
	Total	19.33							
4	KSRRB M400-17. Providing, laying, spreading and compacting graded stones aggregate to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications.MORTH Specification No. 406 (Page no 166, Item no. 20.18 of BCSR 2011-12)	Cum							
			1	193.00	6.50	0.15	188.18		
							188.18	1060.56	199570.88
	Basic Rate	982.00							
	Area Weightage @ 8%	78.56							
	Total	1060.56							
5	KSRRB M500-6. Providing and applying primer coat with bitumen emulsion on prepared surface of granular base including clearing of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications. MORTH Specification No. 502 (Page no 171, Item no. 21.60 of BCSR 2011-12)	Sqm							

			1	193.00	6.50		1254.50		
							1254.50	40.59	50915.64
	Basic Rate	37.58							
	Area Weightage @ 8%	3.01							
	Total	**40.59**							

6	KSRRB M500-18. Providing and laying semi dense bituminous concrete 25 mm thick with 100-120 TPH batch type HMP producing an average output of 75 tonnes per hour using crushed aggregates of specified grading, premixed with bituminous binder at 5% of mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 500.8 complete in all respects as per specifications **25-30 mm compacted thickness with 5% bitumen 80/100 (Grading II)** (Page no 174, Item no. 21.20.1 of BCSR 2011-12)	Cum							
			1	193.00	6.50	0.025	31.36		
	Basic Rate	8224.37					**31.36**	**8882.32**	**278571.75**
	Area Weightage @ 8%	657.95							
	Total	**8882.32**							

7	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications.MORTH Specification No. 803 (Page no 193, Item no. 24.15 of BCSR 2011-12)	Sqm							
	23rd cross , 4th Main		2.50	193.00	0.10		48.25		
							48.25	**429.84**	**20739.78**
	Basic Rate	398.00							
	Area Weightage @ 8%	31.84							
	Total	**429.84**							

8	KSRRB M800-35. Providing and fixing of road stud 100x 100 mm, die- cast in aluminium, resistant to corrosive effect of salt and grit, fitted with lense reflectors, installed in concrete or asphaltic surface by drilling hole 30 mm upto a depth of 60 mm and bedded in a suitable bituminous grout or epoxy mortar, all as per BS: 873 part 4:1973 complete as per specifications (Page no 197, Item no. 24.41 of BCSR 2011-12)	Nos					15.00 290.52 4357.80		
							10.00	**429.84**	**4298.40**
	Basic Rate	269.00							
	Area Weightage @ 8%	21.52							
	Total	**290.52**							

9	Providing and fixing of retro- reflectorised cautionary, mandatory and informatory sign as per IRC :67 made of high intensity grade sheeting vide clause 800.1.3, fixed over Aluminium sheeting, 1.5 mm thick supported on a mild steel angle iron post 75 mm x 75 mm x 6 mm firmly fixed to the ground by means of properly designed foundation with M15 grade cement concrete 45 cm x 45 cm x 60 cm, 60 cm below ground level as per approved drawing complete as per specifications.	Nos							
	60 x 60 cm square						**5.00**	**2756.16**	**13780.80**
	Basic Rate	2552.00							
	Area Weightage @ 8%	204.16							
	Total	**2756.16**							

10	KSRB 4-1.3: Providing and laying in position plain cement concrete of mix M7.5 with OPC cement @ 180kgs, with 40mm and down sze graded granite metal coarse aggregates @ 0.85 cum and fine aggregtes @ 0.57 cum machine mixed machine mixed concrete laid in layers not exceeding 15cms thick well compacted in foundation and plinth including cost of all materials labour HOM of machinery curing complete as per specifications	Cum							
	For Culvert		2	5.00	1.35	0.20	2.70		
	CC Drain		1	160.00	0.75	0.15	18.00		
	Basic Rate	3647.60					**20.70**	3939.41	81545.75
	Area Weightage @ 8%	291.81							
	Total	**3939.41**							
11	KSRB 4.2.2 : Providing and laying in position reinforced cement concrete of design mix M20 with OPC cement @ 320kgs, with 20mm and down size graded granite metal, coarse aggregates @ 0.878cum and fine aggregtes @ 0.459cum with superplastisiser @ 3 lts confirming to IS 9103-1999 Reaffirmed-2008 machine mixed concrete laid in layers not exceeding 15cms thick vibrated for all works in foundation plinth and ground floor level for roof slabs, staircase, lintles, retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets coping, bed blocks, anchor blocks, plain window cills, fillets etc., including cost of all materials, labour, HOM of machinery, curing, complete as per specifications. (P-13, Item 4.11) 2011-12 SR	Cum							
	For Culvert		2x2	5.00	0.75	0.30	4.50		
			2	5.00	1.35	0.23	3.11		
			2	5.00	1.20	0.30	3.60		
	Drain Sidewall		2	160.00	0.75	0.15	36.00		
	raft		1	160.00	0.60	0.10	9.60		
	Covering slab		2	160.00	0.60	0.10	19.20		
							76.01	5296.75	402579.64
	Basic Rate	4904.40							
	Area Weightage @ 8%	392.35							
	Total	**5296.75**							
12	KSRB 4-6.4 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per pecificaitons.(P-17 Item No. 4.31 2011-12 SR)	**Sqm**							
	For Culvert		2x4	5.00	0.90		36.00		
			2	5.00	0.90		9.00		
	Drain Sidewall		4	160.00	0.75		480.00		
	Covering slab		2	160.00	0.60		192.00		
							717.00	221.40	158743.80
	Basic Rate	205.00							
	Area Weightage @ 8%	16.40							
	Total	**221.40**							
13	KSRB 4.9.2 : Providing T.M.T. Steel reinforcement for R.C.C. work including straightening, cutting, bending, hooking , placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3. (Page No. 19& Item No. 4.46)	**Qtl**							
	50 kg/cum		**Qty. Vide Item No.14**				**44.00**	7347.82	323304.22
	Basic Rate	6803.54							

		Area Weightage @ 8%	472.80	544.28			
		Total	6382.80	7347.82			
14	KSRRB M100-1 Loading and Unloading of Stone Boulder / Stone aggregates /Sand/ Kanker / Moorum.KSRRB M100-1 : Placing tipper at loading point, loading with front end loader,dumping, turning for return trip, excluding time for haulage and return trip complete as per specifications.MORTH Chapter 1 (Page no 197, Item no. 24.41 of BCSR 2011-12)	Cum	Qty vide item no 1	114.75	67.18	7708.91
		Add Bare	62.20				
		Area Weightage @ 8%	4.98				
		Total	67.18				
15	Miscellaneous & Unforeseen Charges						3862.86
		Total					1590000.00

Technical Sanction for Rs. 15,90,000=00
Fifteen Lakh Ninety Thousand only
Under P-1771 DOW 11-12
registered as EE No: 15/12-13 Subject
to conditions contained enclosed memo.
No. 106/12-13 Dt. 15-5-12
AE/JE
EE (BTP. Div.)

(Rupees Fifteen Lakhs Ninety Thousands Only)

CERTIFICATE

1 Certified that I have personally inspected the area and prepared the estimate.
2 Certified that the work proposed in this estimate is not including in any other scheme.
3 Certified that the estimate is prepared as per 2011-12 SR of PWD.
4 This works is not split up.

Assistant Engineer

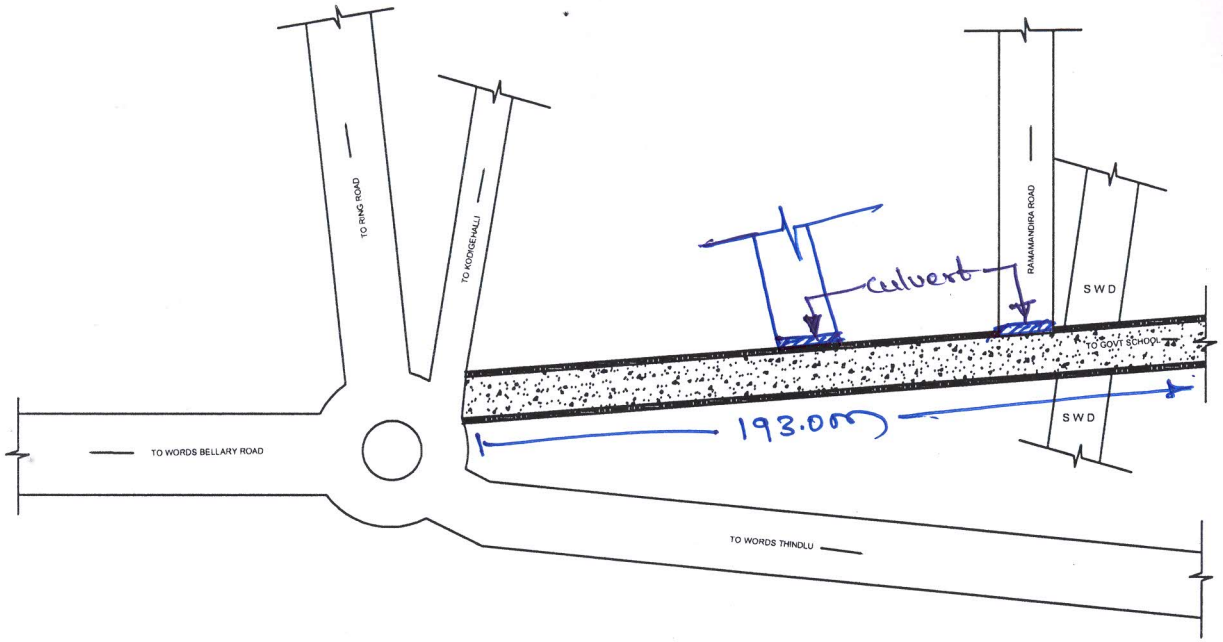
Assistant Executive Engineer
Bruhat Bangalore Mahanagara Palike
Kodigehalli Sub Division

Executive Engineer
Bruhat Bangalore Mahanagara Palike
Byatarayanapura Division

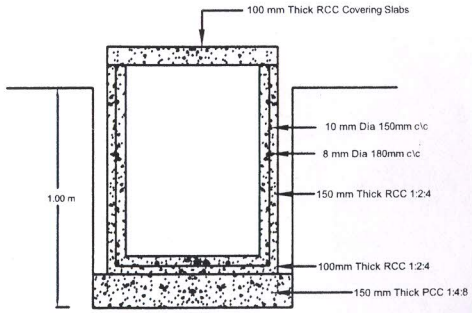
ADMINISTRATIVELY SANCTIONED FOR Rs. 15,90,000.00
Rupees fifteen Lakhs
Ninety thousand only
Under P1771 DOW 11-12
Registered as EE(Y) No. 1293
Subject to conditions contained in
enclosed memo EE(Y) No. 214 /12-13
Dt. 14.05.12 Estimate A/C Sanctioned
JC/Ver/AA/12-13 No. 214
dated 14.05.12 Rs. 15,90,000.00/-

14/5/12
Joint Commissioner
(Byatarayanapura)

Improvements of Roads and Construction of CC Drain with Covering Slab from Kodigehalli Circal to Govt. School in ward no. 8, Kodigehalli sub divisio n



CROSS SECTION OF ASPHALT ROAD


100 mm Thick RCC Covering Slabs
10 mm Dia 150mm c\c
8 mm Dia 180mm c\c
1.00 m
150 mm Thick RCC 1:2:4
100mm Thick RCC 1:2:4
150 mm Thick PCC 1:4:8

C.C. Drain.

CROSS SECTION OF

ASSISTANT ENGINEER
WARD-8, BBMP

ASSISTANT EXECUTIVE ENGINEER
KODIGEHALLI SUB DIVISION
BBMP, BANGALORE

EXECUTIVE ENGINEER
BYATARAYANAPURA DIVISION
BBMP, BANGALORE